

09/473450

WAVELENGTH-SWEPT LASER AND METHOD FOR ITS OPERATION

ABSTRACT

5 The present invention relates to a wavelength-swept laser and a method for
generating laser output. The wavelength-swept pulse laser according to one aspect of the
present invention uses spontaneous mode-locking to produce a pulse output with the center
wavelength continuously varying with time. On the contrary, the wavelength-swept laser
according to another aspect of the present invention suppresses mode-locking to produce
10 continuous output by tuning the filter frequency change speed to the frequency shift speed of
the frequency shifter. The lasers of the present invention are applicable to optical sensing or
WDM optical communication.